



**THE DATASHEET OF  
3GBJ3516-BP**



	<b>E502650</b>
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### Features

- High Surge Forward Current Capability
- Glass Passivated Chip
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

### Maximum Ratings

- Operating Junction Temperature Range: -55 °C to +150 °C
- Storage Temperature Range: -55 °C to +150 °C
- Thermal Resistance: 0.8°C/W Junction to Case(Note 2)

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
3GBJ3508	3GBJ3508	800V	560V	800V
3GBJ3510	3GBJ3510	1000V	700V	1000V
3GBJ3516	3GBJ3516	1600V	1120V	1600V

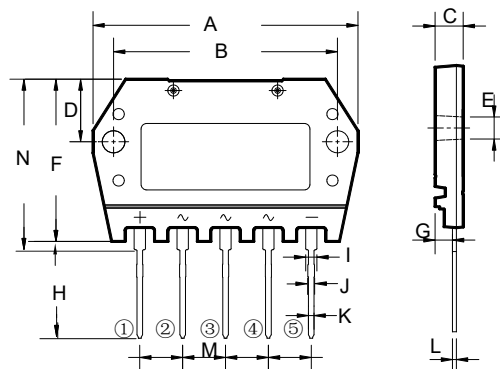
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	35A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	400A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 17.5A$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	10 $\mu$ A	$T_A = 25^\circ\text{C}$
Dielectric Strength	$V_{dis}$	2.5KV	
Maximum Mounting Torque	$T_{or}$	8kg·cm	Recommend torque 5kg·cm
Current Squared time	$I^2t$	660A <sup>2</sup> s	$t < 8.3\text{ms}$

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.  
2. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

## 35 Amp Bridge Rectifier 800 to 1600 Volts

### TSB-5



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1.834	1.874	46.60	47.60	
B	1.555	1.579	39.50	40.10	
C	0.185	0.209	4.70	5.30	
D	0.433	0.457	11.00	11.60	
E	0.157	0.177	4.00	4.50	
F	1.134	1.173	28.80	29.80	
G	0.118	0.126	3.00	3.20	
H	0.677	0.701	17.20	17.80	
I	0.075	0.083	1.90	2.10	
J	0.039	0.047	1.00	1.20	
K	0.035	0.043	0.90	1.10	
L	0.024	0.031	0.60	0.80	
M	0.296	0.304	7.52	7.72	
N	1.193	1.232	30.30	31.30	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

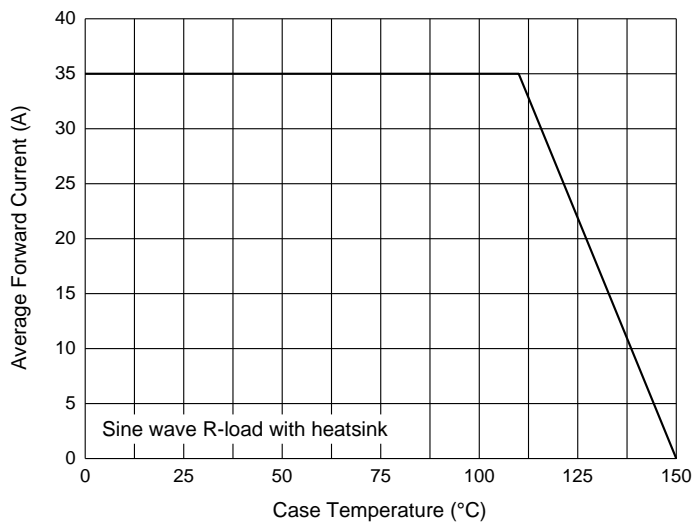


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

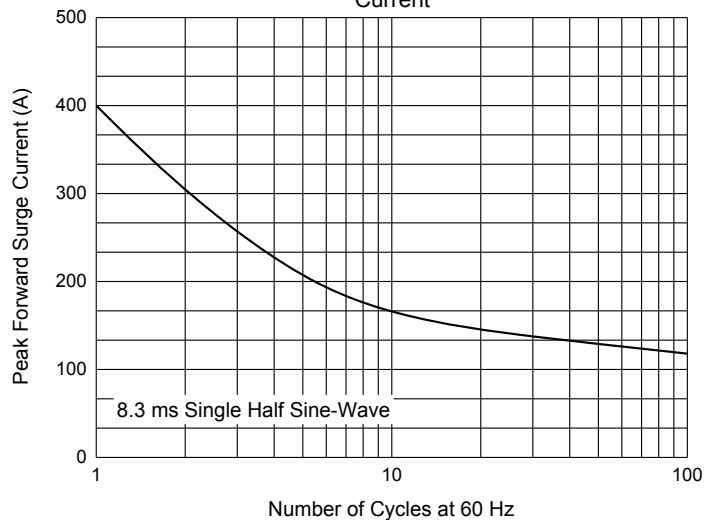


Fig. 3 - Typical Instantaneous Forward Characteristics

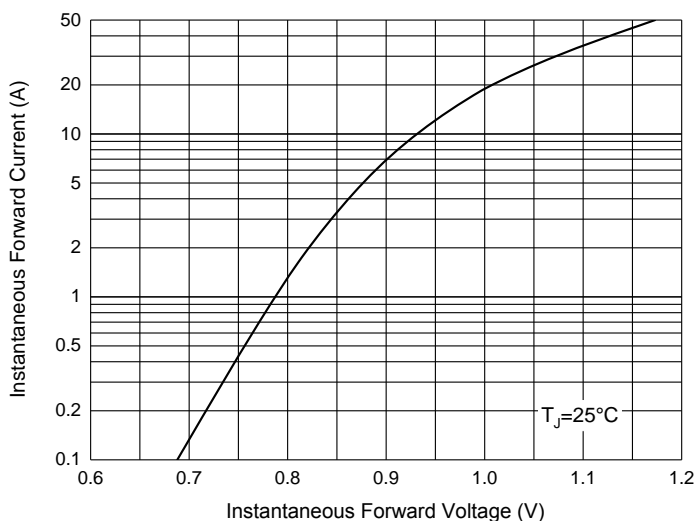
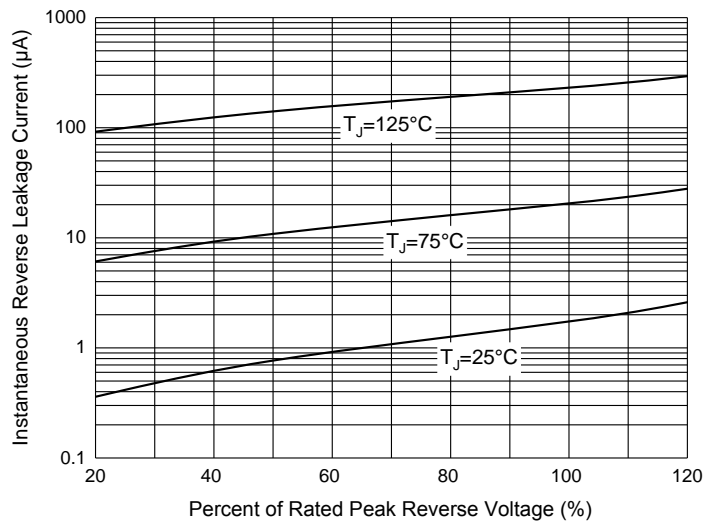


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-BP	Tube:12pcs/Tube, 120pcs/Box,960/Ctn;

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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